

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application. The Office Action of May 30, 2003 has been received and contents carefully reviewed.

By this Amendment, Applicants amend claims 1, 10 and 21-23, and add claim 26. Accordingly, claims 1-26 are currently pending in the present application. Reexamination and reconsideration of the application are respectfully requested.

In the Office Action, the Examiner rejected claims 1, 2, 7, 10, 11, 13, 14, 17-22 and 25 under 35 U.S.C. § 103(a) as being unpatentable over Nelson (U.S. Pat. No. 4,147,581) in view of Chung et al. (U.S. Pat. No. 5,000,795) and Kanda (U.S. Pat. No. 4,338,157); rejected claims 3-6, 8, 9, 12, 15, 23 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Nelson in view of Chung et al. and Kanda, and further in view of Jones et al. (U.S. Pat. No. 3,869,313); rejected claim 16 under 35 U.S.C. § 103(a) as being unpatentable over Nelson in view of Chung et al. and Kanda, and further in view of Tittle (U.S. Pat. No. 4,886,590). Applicants respectfully traverse these rejections.

Claim 1 is allowable over the cited references in that claim 1 recites a combination of elements including, for example, "...a control unit controlling the first tank, the etch bath and the second tank for control, the control unit terminating the etching when a temperature of the first etchant reaches a termination temperature." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 1 and claims 2-9 and 19, which depend therefrom, are allowable over the cited references.

Claim 10 is allowable over the cited references in that claim 10 recites a combination of elements including, for example, "...a control unit controlling to the etch bath, the control unit connected to the temperature sensor for receiving a signal indicating a temperature of the etchant to terminate the etching when the temperature of the etchant reaches a termination temperature." None of the cited references, singly or in combination, teaches or suggests at least this feature of

the claimed invention. Accordingly, Applicants respectfully submit that claim 10 and claim 20, which depends therefrom, are allowable over the cited references.

Claim 11 is allowable over the cited references in that claim 11 recites a combination of elements including, for example, "a separation tank receiving the residual etchant from the etch bath and separating the diluted etchant from the residue material using gravity of the residue material, the separation tank directly transferring the separated diluted etchant to the first tank..." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 11 and claims 12-18 and 25, which depend therefrom, are allowable over the cited references.

Claim 21 is allowable over the cited references in that claim 21 recites a combination of elements including, for example, "...a control unit controlling to the first tank, the etch bath and the second tank for control, the control unit terminating the etching when a temperature of the first etchant reaches a termination temperature." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 21 is allowable over the cited references.

Claim 22 is allowable over the cited references in that claim 22 recites a combination of elements including, for example, "...a control unit controlling the etch bath for control, the control unit connected to the temperature sensor for receiving a signal indicating a temperature of the first etchant to terminate the etching when the temperature of the first etchant reaches a termination temperature, wherein the temperature of the first etchant varies in accordance with a reaction heat generated from etching the glass substrate and the termination temperature of the first etchant depends on total reaction energy." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 22 is allowable over the cited references.

Claim 23 is allowable over the cited references in that claim 23 recites a combination of elements including, for example, "a separation tank receiving the residual etchant from the etch bath separating the diluted etchant from the residue material using gravity of the residue material, the separation tank directly connected to the etch bath via an etchant outlet pipe, the separation tank directly transferring the separated diluted etchant to the first tank..." None of the

cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 23 and claim 24, which depends therefrom, are allowable over the cited references.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited. If the Examiner deems that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at the telephone number (202) 496 - 7500. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

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Respectfully submitted,

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